

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended) A method of diagnosis comprising:
 - (a) providing a biological sample from a human identified as being in need of treatment with ~~a therapeutic agent that is transported by OATP-C~~ rosuvastatin, wherein the sample comprises a nucleic acid encoding OATP-C;
 - (b) testing the nucleic acid for the presence, on at least one allele, of either
 - (i) a codon encoding alanine at the position corresponding to position 174 of SEQ ID NO:1, or
 - (ii) an allele of a polymorphism in linkage disequilibrium with (i); and
 - (c) if either (i) or (ii) is found in at least one allele, diagnosing the human as likely to have reduced ability to transport ~~the therapeutic agent~~ rosuvastatin into liver cells.
2. (Withdrawn) A method according to claim 1 wherein the polymorphism of (b)(ii) is -26A>G, -118A>C, -309T>C, -878A>G, -903C>T, -1054G>T, -1215T>A, or -1558T>C, all of SEQ ID NO:2; or T2122G, C2158T, A2525C, or G2651A, all of SEQ ID NO:3.
3. (Withdrawn) A method according to claim 1 wherein the polymorphism of (b)(ii) is selected from -118A>C and -1558T>C of SEQ ID NO:2.
4. (Currently amended) A method according to claim 1, wherein ~~the therapeutic agent is a statin~~, the human is being treated with one dose level of rosuvastatin and step (c) further comprises diagnosing the human as suitable for titration to another higher rosuvastatin dose level

~~comprising monitoring for a decrease in benefit-risk ratio resulting from the reduced ability to transport the statin into cells~~ if either (i) or (ii) is found in at least one allele.

5. – 6. (Canceled)

7. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 5 mg of [[a]] rosuvastatin daily.

8. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 10 mg of [[a]] rosuvastatin daily.

9. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 20 mg of [[a]] rosuvastatin daily.

10. (Currently amended) A method according to claim [[5]] 1 wherein the human is being treated with at least 40 mg of [[a]] rosuvastatin daily.

11. (Currently amended) A method of diagnosis comprising:

(a) providing a biological sample from a human identified as being in need of treatment with ~~a therapeutic agent that is transported into cells by OATP-C~~ rosuvastatin, wherein the sample comprises an OATP-C polypeptide;

(b) determining whether the amino acid of the OATP-C polypeptide corresponding to position 174 of SEQ ID NO:1 is a valine; and

(c) if the amino acid is not a valine, diagnosing the human as likely to have a reduced ability to transport ~~the therapeutic agent~~ rosuvastatin into liver cells.

12. (Currently amended) A method according to claim 11, wherein ~~the therapeutic agent is a statin~~, the human is being treated with one dose level of rosuvastatin and step (c) further

comprises diagnosing the human as suitable for titration to another, higher rosuvastatin dose level comprising monitoring for a decrease in benefit-risk ratio resulting from the reduced ability to transport the statin into cells if the amino acid is not a valine.

13. (Withdrawn-Currently amended) A method according to claim [[12]] 11, the method further comprising ~~measurement of~~ measuring the level of OATP-C polypeptide expression with valine and/or alanine at position 174 whereby to determine the presence or absence of -118A>C polymorphism in OATP-C nucleic acid.

14. (Withdrawn-Currently amended) A method according to claim [[12]] 11, the method further comprising ~~measuring OATP-C polypeptide for presence or absence of OATP-C *15 allele whereby to determine the presence or absence of -118A>C polymorphism in OATP-C nucleic acid~~ determining, in a sample of nucleic acid from the human, the presence or absence, on at least one allele, of a cytosine at the position corresponding to -118 of SEQ ID NO:2, wherein the presence of the cytosine, combined with the determination that the amino acid of (b) is not a valine, is a further indication that the human is likely to have reduced ability to transport rosuvastatin into liver cells.

15. (Currently amended) A method according to claim [[12]] 11, wherein the amino acid at position 174 is determined to be alanine.

16. – 17. (Canceled)

18. (Currently amended) A method according to claim [[16]] 11, wherein the human is being treated with at least 5 mg of [[a]] rosuvastatin daily.

19. (Currently amended) A method according to claim [[16]] 11, wherein the human is being treated with at least 10 mg of [[a]] rosuvastatin daily.

20. (Currently amended) A method according to claim ~~[[16]]~~ 11, wherein the human is being treated with at least 20 mg of ~~[[a]]~~ rosuvastatin daily.

21. (Currently amended) A method according to claim ~~[[16]]~~ 11, wherein the human is being treated with at least 40 mg of ~~[[a]]~~ rosuvastatin daily.

22. (New) A method according to claim 1, wherein the nucleic acid is tested both for the presence, on at least one allele, of a codon encoding alanine at the position corresponding to position 174 of SEQ ID NO:1 and for the presence, on at least one allele, of a cytosine at the position corresponding to position -118 of SEQ ID NO:2.